

We claim:

1. The use of a genetic modification in the gene for human G protein  $\beta 3$  subunit for the diagnosis of diseases.
2. The use of a genetic modification in the gene for human G protein  $\beta 3$  subunit for establishing the risk of developing a disorder associated with G protein dysregulation.
- 10 3. The use as claimed in claim 2, wherein the genetic modification is in the codon for amino acid 275 in SEQ ID NO:1.
- 15 4. The use as claimed in claim 3, wherein there is substitution of cytosine by thymine in position 825 in SEQ ID NO:1.
5. The use as claimed in claim 2, wherein the disorder is a cardiovascular disease, a metabolic disturbance or an 20 immunological disease.
6. The use as claimed in claim 2, wherein the disorder is hypertension.
- 25 7. A method for establishing a relative risk of developing disorders associated with G protein dysregulation for a subject, which comprises comparing the gene sequence for human G protein  $\beta 3$  subunit of the subject with the gene sequence SEQ ID NO:1, and, in the event that a thymine (T) is 30 present at position 825, assigning the subject an increased risk of disease.
8. A method as claimed in claim 7, wherein the comparison of genes is carried out by sequencing.
- 35 9. A method as claimed in claim 8, wherein a gene section which includes position 825 is amplified before the sequencing.
10. A method as claimed in claim 7, wherein the comparison of 40 genes is carried out by hybridization.
11. A method as claimed in claim 7, wherein the comparison of genes is carried out by cleavage using restriction enzymes.
- 45 12. A method as claimed in claim 11, wherein the restriction enzyme Dsa I is used.

The use of a genetic modification in the gene for human G protein  $\beta_3$  subunit for the diagnosis of diseases

5 Abstract

The present invention relates to the use of a genetic modification in the gene for human G protein  $\beta_3$  subunit for the diagnosis of diseases.

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